

GUIDELINES FOR THE PRODUCTION OF  
MATERIAL IN LARGE TYPE by the  
NATIONAL SOCIETY FOR THE PREVENTION  
OF BLINDNESS.

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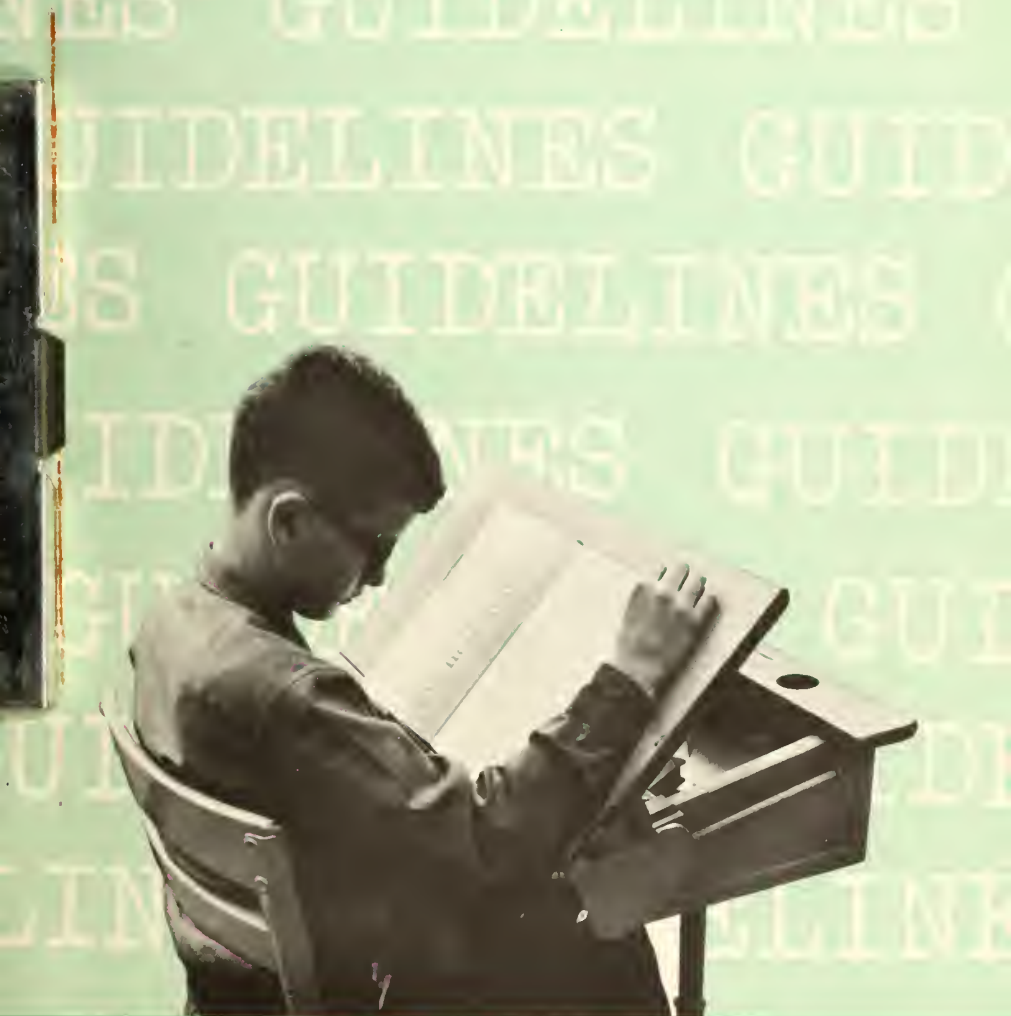
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**GUIDELINES FOR  
THE PRODUCTION OF MATERIAL  
IN LARGE TYPE**



**NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS, INC.**

16 East 40th St., New York, N.Y. 10016

*The National Society for the Prevention of Blindness acknowledges with gratitude the invaluable guidance and counsel of its Committee On Standards For Large Type Material in the preparation of this guide. The suggestions and recommendations included have the approval and endorsement of this committee.*

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## INTRODUCTION

Although a number of partially seeing children read regular size print, there are many who require larger than average type size. It has long been recognized that there is a dearth of material in large type which is comfortable for many partially seeing children over an extended period of use. A description of the pupils for whom special material should be prepared, based on individual educational needs, may be stated as follows: those who, after the best possible correction and/or treatment, have a visual limitation which may significantly interfere with learning and the use of library services unless large type materials are made available to them.

Lack of material in large type has become a particular problem in view of the development in recent years of resource-room and itinerant-teacher programs in which students are enrolled in regular classrooms and utilize a wide variety of texts. This shortage of large type materials is critical in upper elementary and secondary school programs, both as regards text and collateral readings obtained from libraries.

To help fill these needs, various groups of volunteers have been organized throughout the country. Their services are much appreciated. They have contributed greatly toward overcoming the gap between existing printed materials and the additional materials required for partially seeing pupils to be able to participate in regular classrooms.

In their desire to produce the best possible product, the volunteers have turned for guidance to state and national resources. In view of its long history of concern for the highest standards in educational programs for partially seeing children, the National



Society for the Prevention of Blindness called a conference to develop a guide to help the volunteers produce materials of the quality needed by partially seeing children.

The conference group was comprised of those with a primary interest in quality education for partially seeing children, and who had been involved in research related to type and type size or the use of magnification. Representatives were present from the National Society for the Prevention of Blindness, the Society's national Advisory Committee on Education of Partially Seeing Children, the American Association of Instructors of the Blind, the American Library Association, the American Printing House for the Blind, the Library of Congress, the ophthalmological profession, Stanwix House Incorporated, state departments of special education, and the Wilmer Ophthalmological Institute of Johns Hopkins University. Additional persons concerned with quality materials reviewed the publication. *Guidelines for the Production of Material in Large Type* reflects the consensus of these representatives.

As its title indicates, *Guidelines for the Production of Material in Large Type* is not intended to serve as a complete manual for procedure, but rather as a guide. In selecting volunteers to prepare large print materials, it is presumed that only those having skill or aptitude in the method being used will be chosen. In addition, it is recommended that if typists are used, they have a current secretarial handbook.

Suggestions contained in the following guidelines are included to point up special criteria for preparing large-type material.

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# GUIDELINES FOR THE PRODUCTION OF MATERIAL IN LARGE TYPE

(Prepared Especially to Assist Volunteers)

Many of the following suggestions may be applied equally to material typewritten on paper or on multilith master sheets.

## I. TYPEWRITING

### A. Typewriter

The typewriter must be in perfectly clean condition (clean roller, keys, paper holders, etc., after each use or during use if necessary). *It must be in perfect alignment to insure uniformity of impression by type face* (increased manual pressure will not do this—call in the service man).

Availability of service is an important factor to be considered in purchasing a typewriter. Most typewriters now come in electric models. In general, these make possible the best impression.

Other factors to keep in mind regarding the typewriter are: type style, platen, platen position, impression control, adjustment of ratchet. The typist should be thoroughly familiar with the machine. A manual on its use may be obtained from the typewriting company or the local dealer.

**(1) Type Size**—Most typewriters are described in terms of pitch number, *i.e.*, the number of letters and spaces included in a horizontal inch. It is recommended that a typewriter be used that has 6, 8, or 9 pitch. Nothing smaller than a lower-case letter of  $\frac{1}{8}$ " in height should be considered "large type." In general, the range for partially seeing individuals is between 18 and 24 point type.

*Samples*

*18 Point Typewriter Type (sans serif)*

In Gladwin Park there  
is a fine pond where  
children like to sail  
boats

Few parents realize that during the progress of these dis-

(2) *Spacing*—Distance between lines should be essentially equivalent to the height of the tallest letter in the line. The typewriter company will provide the necessary ratchet to insure such spacing. Spacing should come as nearly as possible to that shown in the following samples:

*Serif Print*

This is a specimen of 18 point  
Century Schoolbook type

*18 Point Typewriter Type (sans serif)*

Every so often one  
and another engine

(3) *Type Style*—Most typewriting companies have special identifying names for their type styles. Among these are: Bold Face Gothic (sans serif); Gothic (sans serif); Giant Primer (sans serif); Butterick; Large Vogue; Large Book Face; Directory. It is important that the machine have both upper and lower case letters. It is well to keep in mind that type having a broader face will photograph better than type having a slim, sharp face; the latter is not recommended.

The following sources are among those offering machines with type fonts that come within the definition of large type: IBM; Olympia; Remington Rand; Royal McBee; Smith-Corona; Olivetti Underwood. Request samples of type fonts and make selection as nearly equal to the above samples as possible.

(4) *Ribbon*—The ribbon should always be at maximum darkness. Although there are fine cotton and nylon ribbons, it is generally agreed that the new carbon ribbon (polyethylene film) should be used. It is especially recommended in the preparation of offset masters. Before purchasing a ribbon, consult the type-



writing company representative and explain clearly the purpose for which the machine is to be used, *i.e.*, typing in large, clear, clean type for partially seeing individuals.

## **B. Procedure**

A firm, even touch produces the best impression. *Accuracy* is of paramount importance; no erasures or strikeovers can be permitted.

## **C. Paper**

It is particularly important that there is no show-through, especially when both sides of the paper are to be used. Purchase paper from a paper merchant if at all possible; he will be glad to submit samples for trial. Specify as follows:

*Color:* WHITE (avoid such designations as "high white" or "blue white").

*Quality:* VELLUM (dull-finish, non-glare).  
OPAQUE (.91 to .92 opacity, such as Mohawk Opaque, Beckett Opaque, Hammerhill Hyolite, Bulkopaque).

*Weight:* 50 lb.

*Size:* 8½" x 11" to 10" x 13".

## **D. Format**

### **(1) Margins**

For 8½" x 11" paper—Top: ¾"

For 10" x 13" paper—Top: 1"

For 8½" x 11" paper—Bottom: 1"

For 10" x 13" paper—Bottom: 1¼"

Outside: 1"

Bound-in side: 1¼"

*Caution:* Odd-numbered pages will be those with left-hand side bound into the book. Even-numbered pages will be those bound into the book on the right-hand side. *Watch* this in establishing left-hand and right-hand margins.

**(2) Paragraphing**—Indent the first line of each paragraph five spaces. Double space between paragraphs.

**(3) Pagination**—Remember: Odd-numbered pages will be those with the left-hand side bound into the book; even-numbered pages will be those with the right-hand side bound into the book.

Center the page number ½ inch from the bottom of the page. In parenthesis following this number indicate comparable paging of the original text. (This is helpful to the regular grade teacher in referring to pages during the lesson. Also, if this is done, the index will follow that in the original book.)

## Examples

<i>Number of large-type page</i>	<i>Original page number</i>
1	(1)
2	(1)
3	(1 and 2)
4	(2)
etc.	
— OR —	
<i>Number of large-type page</i>	<i>Corresponding original page number (not to appear on large-type page)</i>
1A	1
1B	
1C	
etc.	
2A	2
2B	
2C	
etc.	

*Table of Contents:* To be most helpful, when the original book results in two or more volumes of large type, the appropriate section of the original table of contents should be included in each volume. Pagination would also follow the above examples.

**(4) Footnotes**—Books, especially at the secondary level, may require footnotes. Consult the teacher of the partially seeing child regarding retention or elimination of footnotes. Those that are to be retained should be carefully related to the text and placed on appropriate pages, in large type. In indicating footnotes, use only asterisks, *i.e.*, \*, \*\*, \*\*\*, or as many as may be required.

**(5) Index and Back Matter**—Index, appendices, bibliography, etc., exclusive of atlases, should appear in every volume. (See also “Pagination,” p. 9.)

**(6) Titles**—Center, capitalize and underline all titles. Underline each word separately. Begin text three spaces below chapter titles. Allow two spaces above subtitles. Begin subtitles at left-hand margin, using upper and lower case. Underline subtitles in running line and begin text two spaces under subtitles.

*Caution:* Be consistent in following chosen form throughout the work.

**(7) Page Content**—Do not end a page with a title, subtitle or chapter title. Start a new page.

**(8) Hyphenating**—Do not hyphenate under four or five characters; if necessary, move the whole word to the next line. Always favor the shorter line. Have a dictionary at hand to insure correct hyphenating.

### E. Illustrations

Some illustrations are included in textbooks for decorative rather than educational purposes. Consult the teacher of the partially seeing child for directions as to inclusion or deletion of illustrations. Illustrations directly related to the text may be retained. If it is necessary to re-draw them for simplification, care should be taken to see that they still relate to the educational concept.

Whatever illustrations (pictures, charts, graphs, etc.) are included should, if possible, be executed by a competent artist. They should be simple, uncomplicated line drawings. Elimination of any clutter is desirable.

### F. Poetry

Center the longest line before beginning. If necessary to break a line, indent two spaces for its continuation. If the poem or verse being copied already has indented lines, these should begin four spaces in; and indent six spaces when breaking these indented lines.

#### *Example*

They were but sweet, but  
figures of delight,  
Drawn after you, you  
pattern all of those.  
Yet seem'd it winter  
still, and, you away,  
As with your shadow I  
with these did play.

### G. Graphs, Tables, etc.

If the graph is too wide for the paper, it is permissible to type it on the long side of the paper. The top of the graph or table on the left-hand page will always be on the outer margin. The top of the graph or table on the right-hand page will always be on the bound side.

### H. Fractions

Mathematical fractions, power signs, symbols, formulas, etc., should be in large type.

## II. PROOFING

It is advisable that two people be used for proofreading, one to read to the other. *Read everything.*

## III. DUPLICATED MATERIAL

By their very nature, mimeographing and dittoing present so many duplication problems that extreme caution should be exercised in accepting these methods to reproduce material for the partially seeing child. Neither method is recommended for this purpose.

### A. Offset Printing

Offset Printing is done by transferring an inked impression from a mat or plate onto an intermediary cylinder and from there onto the final copy. There are two general methods by which offset mats or plates are made: direct, and indirect. The direct method has the advantage of being faster, cheaper, and simpler. It has the disadvantages of poorer quality reproduction, lack of flexibility in selection of type faces and illustration technique, and shorter life on the press. The indirect method has more steps, takes longer, requires more highly skilled operators, and is more expensive. It offers, however, much greater flexibility in selection of type sizes and faces, can reproduce practically any illustrative technique, offers many more opportunities to correct errors, and can produce top quality copies.

**(1) Direct**—In the direct method, typing is done directly on the offset mat, often referred to as the multilith master. (Refer to "I. Typewriting.") The multilith machine salesman or service man will teach you how to prepare copy. It is important to have specific information on equipment and techniques and to have a manual of directions at hand at all times. One source for such a manual is Addressograph-Multigraph Corporation, 1200 Babbitt Road, Cleveland, Ohio 41117, which distributes a helpful bulletin, *Making a Good Impression on Your Master*.

**Caution:** Handle the multilith direct image master by the edges.

Do not bend or fold it since the fold is likely to pick up ink when the copies are duplicated. Clean fingers mean clean masters. Do not use hand lotion while working on the multilith master. When the master is completed, be sure to hold the top edge and carefully roll it up and out from the typewriter. It must be stored until ready for duplication in an ample-sized box which will not permit entrance of dust or grease.

**(2) Indirect**—In indirect offset printing, the original is prepared on a sheet of white paper; from this the photographic negative is made. Before submitting for photography, examine typewritten copy closely for broken or uneven characters. A hand magnifier will be useful in spotting these. Remember that duplication em-

phasizes irregularities. *Minor* breaks in print may be repaired if done very carefully with a black-ink ballpoint pen. If errors are noted when proofreading, do not erase, but cover with a commercial whitener such as SNOPAKE and retypes. Special care must be taken to insure proper alignment.

After photography, the negative should be inspected and re-touched. Unwanted specks, dots, and marks can be painted out with commercially available photographic opaque. Also small marks which need to be added can be put in by scribing with a small scraper or needle. All of this work should be done on the emulsion (dull appearing) side of the film, working over a light table. Since the copy will be reversed (mirror image), a certain amount of practice is required to do this work well.

The negative is then ready to have a plate made from it which will be used on the offset press. Be sure to follow the directions of the plate manufacturer carefully, particularly regarding exposure time, development, and storage before use on the press.

### **A. Quality of Image**

In reproducing typewritten or printed material, be sure the reproducing process being used does not have a gray cast or extraneous splotches over the sheet, and that the letters are of uniform density, clear (no spread), and without breaks.

### **B. Photographic Enlargement**

If the volunteer is to do the actual photographic reproduction into large type, it is important that full instructions on the use of the reproducing equipment be obtained from the company representative or salesman.

Watch out for graying, splatter, scum, etc., resulting from duplication. Copies which show such discrepancies should be rejected.

If there is a choice, use the first printing of the book to be reproduced in which the type is likely to be clearest. Examine each page carefully for spots (these can be removed with SNO-PAKE); for broken serifs, uneven letters, etc., dots over "i" (these can be corrected with black-ink ballpoint pen); for smudges (these can be removed with an art gum eraser, but be sure the eraser is clean).

In reproduction of colored illustrations, the colors appear as black or shades of gray. Therefore, unless figures in the original are sharply defined, it may be well to eliminate the illustration by covering it with white opaque paper. At the discretion of the teacher of the partially seeing child, the space may be used for drawing a simplified illustration or for type which may be moved back from the next page.

**(1) Quality**—Mend type, clean page, etc., where necessary, before placing the material under the lens. Care in operating the



equipment will aid in obtaining good copy without scum.

**(2) Format**—When size of blow-up desired has been decided upon (1) count number of inches of copy from original book which, after enlargement, will fit on a page; (2) cut original book accordingly and photograph in segments. To determine how to obtain the proper magnification, consult the regular operator of the photographic equipment.

After deciding how many inches of copy will fit on a page of large type, count the number of lines which will completely fit in that many inches. The type may then be cut from the original book and pasted on a blank sheet of paper in units of one large type page at a time. It is necessary to have three copies of the original book to work with. Two are needed to cut up: one for each side of the page. The third is needed as a master copy for proofreading. In pasting the "cut up" type on a blank sheet, it often will be necessary to combine type from the bottom of one page in the original book with type from the top of the next page in order to get a full page of type in the large type book. In these instances, care should be taken to achieve the same space between the lines of type which are being matched together as there is between the other lines of type.

All technical operations should be done by a trained, skilled operator.

**(3) Pictures, Illustrations**—Line drawings are readily reproduced. Solids will not reproduce with xerography. Graphs, charts, etc. (except those that include heavy solids) will reproduce. If colors are present, red, brown and black will appear as black. Blue, yellow and probably green will not photograph unless appropriate filters are used over the lens of the camera.

Wherever possible, substitute line drawings for half-tone pictures or solid drawings. It is advisable to have an artist do this.

### **C. Microfilming**

Microfilming is a process of photography on 16 mm. or 35 mm. film which primarily permits storage in small space. It is an involved procedure requiring trained personnel not only to do the filming but also the inspecting of films. It is therefore recommended that this be done by representatives of one of the microfilming services. Microfilming services are available through such companies as

	<i>Trade Name</i>
Bell and Howell	Micro-Data
Recordak Corporation	Recordak
Remington Office Systems	Film-A-Record
Minnesota Mining & Mfg. Co. (3M)	Filmac

Microfilm can be "printed out" in any desired size. Since any magnification of the original print will increase the size of the

page correspondingly, it is well to submit a sample of material to be microfilmed in large type. This may permit adjustments to be made which will avoid the possibility of oversized books.

#### IV. GENERAL

##### A. Book Size

Keep size of book to no more than 10" x 13". Large, unwieldy books are undesirable.

##### B. Book Thickness

The number of pages per volume will depend upon the weight of the paper and this factor is directly related to the opacity. If the opacity is such that both sides may be used with little or no show-through, approximately 100 to 150 sheets (200 to 300 pages of copy) are permissible.

##### C. Binding

Binding should be as flexible as possible so that pages will lie flat. Covers should be as stiff and strong as possible. (It is *not* recommended that heavy sheets of paper be used as covers.) The American Printing House for the Blind, 1839 Frankfort Avenue, Louisville, Kentucky 40206, is one manufacturer of an acceptable binding. (For further information from the Printing House, please refer to the Krebs binder.)

*Caution:* Before binding, check each page to make sure it is perfect with regard to type, content and pagination.

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#### OTHER VOLUNTARY OR OFFICIAL AGENCIES PROVIDING INFORMATION ON LARGE TYPE

American Printing House  
for the Blind, Inc.  
1839 Frankfort Avenue  
Louisville, Kentucky 40206

The Library of Congress  
Division for the Blind  
Washington, D.C. 20540

National Aid to Visually  
Handicapped  
3201 Balboa Street  
San Francisco, California 91420

National Braille  
Association, Inc.  
51 East 42nd Street  
New York, New York 10017

U.S. Office of Education  
400 Maryland Avenue, S.W.  
Washington, D.C. 20202

Xavier Society for the Blind  
154 East 23rd Street  
New York, New York 10010





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